

REQUEST FOR ACCESS OF ABANDONED APPLICATION UNDER 37 CFR 1.14(a)

PROCESSED BY

NOV 15 1991

FII

In re Application of

LYMAN

Application Number

Page 1

162 407

12/3/93

Ground Air Unit

Examiner

**Assistant Commissioner for Patents
Washington, DC 20231**

Paper No. 11/12

I hereby request access under 37 CFR 1.14(a)(3)(iv) to the application file record of the above-identified ABANDONED application, which is: (CHECK ONE)

(A) referred to in United States Patent Number 5554512, column ,

(B) referred to in an application that is open to public inspection as set forth in 37 CFR 1.11, i.e.,
Application No. , filed , on page of
paper number

(C) an application that claims the benefit of the filing date of an application that is open to public
inspection, i.e., Application No. , filed , or

(D) an application in which the applicant has filed an authorization to lay open the complete
application to the public.

Please direct any correspondence concerning this request to the following address:

Signature

Typed or printed name

OR PTO USE ONLY

Approved by:

Initials

Unit-

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.**



US005554512A

#12

United States Patent [19]**Lyman et al.**[11] **Patent Number:** **5,554,512**[45] **Date of Patent:** **Sep. 10, 1996**[54] **LIGANDS FOR FLT3 RECEPTORS**[75] Inventors: **Stewart D. Lyman, Seattle; M. Patricia Beckmann, Poulsbo, both of Wash.**[73] Assignee: **Immunex Corporation**[21] Appl. No.: **243,545**[22] Filed: **May 11, 1994****Related U.S. Application Data**

[63] Continuation-in-part of Ser. No. 209,502, Mar. 7, 1994, abandoned, which is a continuation-in-part of Ser. No. 162,407, Dec. 3, 1993, abandoned, which is a continuation-in-part of Ser. No. 111,758, Aug. 25, 1993, abandoned, which is a continuation-in-part of Ser. No. 106,463, Aug. 12, 1993, abandoned, which is a continuation-in-part of Ser. No. 68,394, May 24, 1993, abandoned.

[51] Int. Cl. ⁶ **C12N 15/19; C07H 21/04**[52] U.S. Cl. **435/69.5; 435/69.1; 435/172.1; 435/240.2; 435/252.3; 435/320.1; 530/351; 530/399; 536/23.5; 935/13; 424/85.1**[58] **Field of Search** **536/23.5; 530/350; 530/351; 399; 435/69.1, 69.5, 69, 7, 240.2, 320.1, 172.1, 252.3; 935/13; 424/85.1**

[56]

References Cited**U.S. PATENT DOCUMENTS**

5,185,438 2/1993 Lemischka 536/23.2

OTHER PUBLICATIONSJ. G. Flanagan et al. *Cell* 63:185-194, 1990.O. Rosnet et al. *Oncogene* 6:1641-1650, Sep. 1991.*Primary Examiner*—Stephen G. Walsh*Assistant Examiner*—Lorraine M. Spector*Attorney, Agent, or Firm*—Stephen L. Malaska

[57]

ABSTRACT

Ligands for *flt3* receptors capable of transducing self-renewal signals to regulate the growth, proliferation or differentiation of progenitor cells and stem cells are disclosed. The invention is directed to *flt3-L* as an isolated protein, the DNA encoding the *flt3-L*, host cells transfected with cDNAs encoding *flt3-L*, compositions comprising *flt3-L*, methods of improving gene transfer to a mammal using *flt3-L*, and methods of improving transplantations using *flt3-L*. *Flt3-L* finds use in treating patients with anemia, AIDS and various cancers.

21 Claims, No Drawings